«Hackability» What it means, why it's important

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- Defining hackability
- Why is it important?
- The Web is hackable by nature



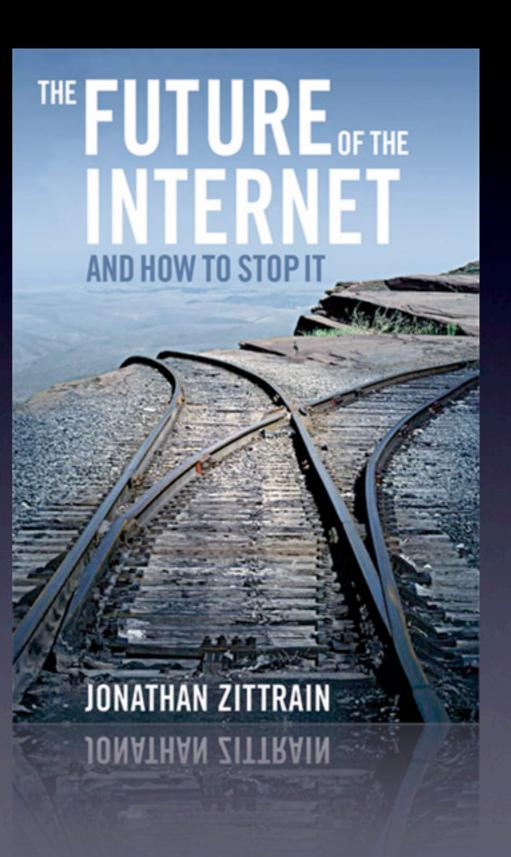
Hackability : (or ability to tinker) Ability, for a tool or device to be modified in a way that was not intended by its inventor so that users can invent new ways to use it. See also: Generativity.



Note: hackability does not take into account whether it is legal or not to hack.



Hackability & Generativity





Why is hackability important?

- Using tools the way we want:
 - Accessibility
 - mashing-up content
- repair/fix/improve tools
- Invent new tools
 - Respond to user needs that were not taken into account by tool manufacturers
 - Combine tools in creative ways



Tool vendors often lack vision

- It was thought that phones would be used to listen remotely to operas
- It was thought that texting would be useful for telco operators to communicate with with their customers about network availability
- It was thought that *Twitter* would be useless
- It was thought that the Web would be a gigantic scientific publication system

...and fear loosing control of the tool

«Apparently our open API is giving our customers unprecedented control over their own lives and allowing them to seize control of their destinies. So please shut it down.»



NOISE TO SIGNAL

Rob Cottingham

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Case: Hush-A-Phone vs. AT&T



Tool vendors fight back

- AT&T refused to let anyone plug anything onto their system. «It will damage it!»
- Apple refuses that you plug anything other than an Apple device to iTunes (Palm Pre, for example) and denies the ability to install unreviewed apps onto the iPhone
- Texas Instruments refuses people to install a different firmware onto calculators
- MediaFire tried to intimidate Mozilla about the SkipScreen add-on

Hackability is the ability to:

- Participate and create instead of just consume passively
- Invent the future we want, not the one we're given (or sold)



PC + Internet = hackability²



The Web is hackable by nature

- View the source (HTML+CSS+JavaScript) (Ctrl-U : View source)
 - Learn from it, change it
- Open, patent-free documented formats



Cool things that are enabled by hackability

- Wikipedia
- OpenStreetMap
- Flickr.com : 4 billion pictures, including 120M under CC license
- Free and Open-Source Software: development & distribution
- and millions of other examples (LOLcats!)

We need to keep improving the browser

- ... to make the Web (and the hackability that comes with it) relevant against proprietary platforms that are not hackable.
- ... so that mobiles can be as hackable as the PC (without having to go through a locked down App Store).

The Web is hackable on several levels

- Content: HTML/CSS/JS +DOM
- User Interface
- Rendering engine

- Stylish + GreaseMonkey + XBL
- Extensions+JetPack
 +Ubiquity
- Patch Gecko (Free and Open Source)



Demos!

(Paul Rouget is going to do it again)



If we want our future not to be like...











...then we need to make sure we use and promote hackable technologies

Hacking is actually making sure we get the digital future that we want, not the one that they're selling us.



Thank you !